

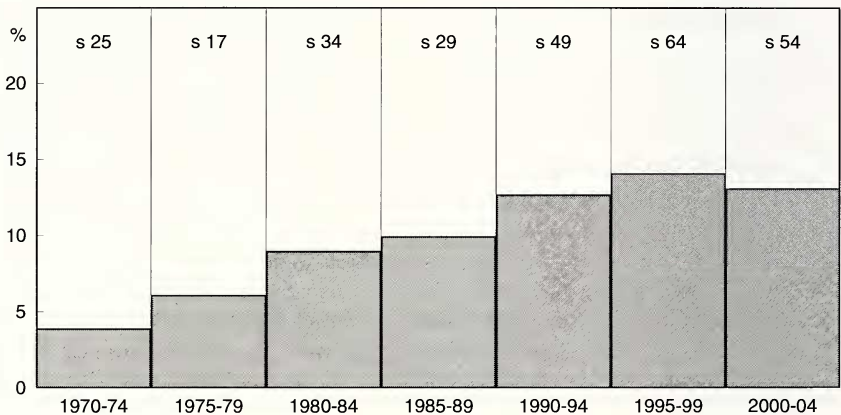
- 6 Pronotum base and sides broadly red, exocorium whitish. L = 7.5-8.5mm.
 [Germany, France, Morocco, E to Iran] *fieberi* (Schummel) part
 – Pronotum base and sides narrowly red. L = 7.5-8.5mm
 [S of Germany, France, Portugal, E to Poland] *rotundicolle* Dohrn
- 7 Pronotum with 6 black marks, may be much reduced or enlarged & merge;
 or 2 large lobed black marks 8
 – Pronotum with 2 large rounded black marks (not lobed), may merge
 on midline. 9
- 8 Dark markings violet blue-black, generally more extensive than the
 red ground colour. Apical half of exocorium dark. L = 7.2-8.5mm
 [S of France, Iberia, Madeira] *herbaceum* (Herrich-Schaeffer)(part)
 – Dark markings pure black, generally less extensive than red ground
 colour. Exocorium with ±median black mark. L = 7-9mm. [S. of England,
 Sweden to Morocco, E to China] *ornatum* (L.)
- 9 Venter ground colour red; tibiae without broad pale band. L = 7.2-8.5mm.
 [S of France, Iberia, Madeira] *herbaceum* part
 – Venter ground colour not usually red; tibiae with broad pale band.
 (Ground colour of upperside varies from white to scarlet.) L = 5.5-7.5mm.
 [S of England, Finland to Morocco, E to Siberia] *oleracea* (L.)

Dasychira pudibunda L. (Lep.: Lymantriidae) melanism in north-west Kent

On 6 May my garden m.v. light attracted an unusual melanic of this species possessing a broad, well defined central blackish band on the forewings, leaving the basal and sub-basal, and sub-marginal areas the normal grey, and with some darkening of the thorax, body and hindwings – ab. *fasciata* Lempke. Chalmers-hunt 1962 (*The Moths and Butterflies of Kent*, Sup. Ent. Record 74) makes no mention of form, nor have I encountered it previously.

The extreme melanic ab. *concolor* Stdgr. is noted in this work as having been not recorded until 1948 in the county, stating that it appeared to be increasing in numbers, and gives a scattering of records. My garden m.v. light was operated first in 1969, and a specimen of ab. *concolor* appeared in 1971, though the next not until 1978. The presence of ab. *concolor* in Britain goes back to 1934 according to Kettlewell 1973 (*The Evolution of Melanism* 49) and has remained restricted to south-east England as far north as the Thames Valley, but not north of this, with

increasing frequency. Records sent to him by Bretherton for Surrey are quoted, this for 1946 to 1963 incidence for *ab. concolor* was 1% (N=570) and for 1964 to 1969 5% (n=120). This information is particularly useful and interesting as my records for Dartford continue from this period. As my garden m.v. light commenced operation in 1969 it is unlikely that I should have encountered *ab. concolor*, or even a normal specimen of *D. pudibunda* before this date, other than from an occasional larva. The first *ab. concolor* seen was on 8.vi.1971, and the second in 1978. The accompanying table indicates that in the five year period 1970-1974 its incidence was 4% (n=25) and for 1975-1979 it was 6% (n=17), the samples being rather small, though in subsequent periods samples were larger. An increase in frequency was observed until 1995-1999 when it reached 14% (n=64), to decline slightly for the first five years of the twenty-first century. Throughout the period since 1969 only males have been observed at the light.



D. pudibunda *ab. concolor* % frequency and sample size at Dartford, 1970-2004.

Melanism has been a comparatively late development in *D. pudibunda*, being first noted in Britain in 1938. Its early extension of geographical range coincided with World War II and passed largely unnoticed, but its later history is both interesting and unusual. This its frequency has increased coincident with a period of general decline in industrial melanism, its geographical distribution has remained limited to parts of south-east England south of the Thames and the London area and it has flourished equally in rural and industrial settings. Kettlewell has suggested that these extreme melanics of *d. pudibunda* may have originated from immigration from the Continent rather than by mutation. Increase in frequency appears to have ceased, only time will tell whether significant decline is in progress.—B.K. West, 36 Briar Road, Dartford, Kent DA5 2HN.